

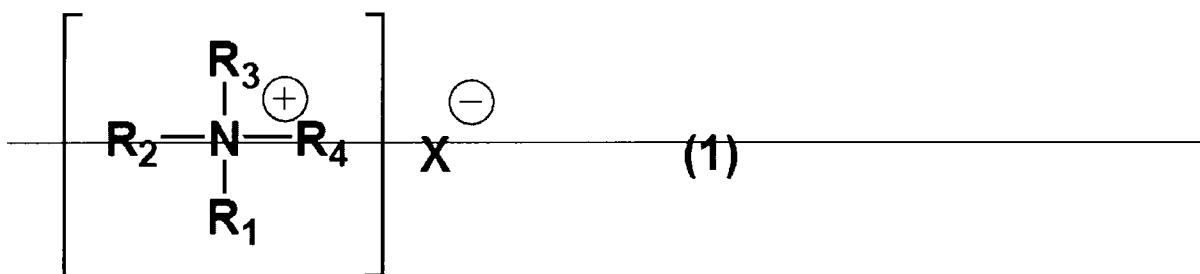
# IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A catalyst composition for producing a rigid polyurethane foam and/or an isocyanurate-modified rigid polyurethane foam comprising at least the following amine compounds of (A) and (B):

wherein (A) is ~~[[a]]~~ one or more quaternary ammonium salt salts selected from the group consisting of tetramethylammonium acetate, tetramethylammonium formate, tetraethylammonium acetate, tetraethylammonium formate, tetrapropylammonium acetate, tetrapropylammonium formate, tetrabutylammonium acetate, tetrabutylammonium formate, methyltriethylammonium acetate, methyltriethylammonium formate, methyltripropylammonium acetate, methyltripropylammonium formate, methyltributylammonium acetate, and methyltributylammonium formate; and

~~represented by the following general formula (1):~~



~~wherein each of R<sub>1</sub> to R<sub>3</sub> represents a saturated or unsaturated hydrocarbon group having 1 to 12 carbon atoms, R<sub>4</sub> represents an alkyl group or an aromatic hydrocarbon group having 1 to 18 carbon atoms, and X represents an organic acid group having an acid dissociation constant (pK<sub>a</sub>) of 4.8 or less, provided that any two of R<sub>1</sub> to R<sub>3</sub> may together form a hetero ring through a carbon atom, an oxygen atom, or a nitrogen atom;~~

wherein (B) is ~~one or two~~ one or more hydrophobic amine compounds selected from the group consisting of ~~N-methyldicyclohexylamine, N,N-dimethylbenzylamine, N,N-~~

dimethyloctylamine, N,N-dimethylnonylamine, N,N-dimethyldecylamine, N,N-dimethylundecylamine, N,N-dimethyldodecylamine, N,N-dimethyltridecylamine, N,N-dimethyltetradecylamine, N,N-dimethylpentadecylamine, N,N-dimethylhexadecylamine, N,N-dimethylheptadecylamine, and N,N-dimethyloctadecylamine, ~~N-methyldioctylamine, N-methyldinonylamine, N-methyldidecylamine, N-methyldiundecylamine, N-methyldidodecylamine, N-methylditridecylamine, N-methylditetradecylamine, N-methyldipentadecylamine, N-methyldihexadecylamine, N-methyldiheptadecylamine, and N-methyldioctadecylamine.~~

Claim 2 (Currently Amended): The catalyst composition according to claim 1, wherein the organic acid constituting the quaternary ammonium salt ~~represented by the general formula (1)~~ is formic acid and/or acetic acid.

Claim 3 (Canceled).

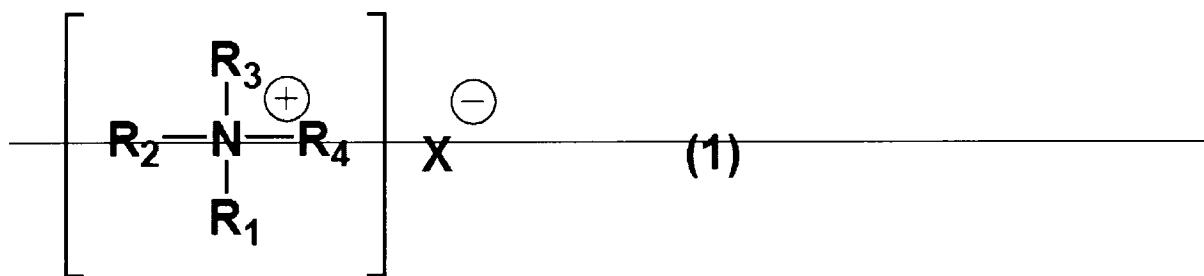
Claim 4 (Currently Amended): The catalyst composition according to claim 1, which further comprises the following amine compound of (C):

wherein (C) is one ~~or two~~ or more heterocyclic tertiary amine compounds selected from the group consisting of 1-isobutyl-2-methylimidazole, 1-methylimidazole, 1,2-dimethylimidazole, 1-(2-hydroxyethyl)-2-methylimidazole, 1-(2-hydroxypropyl)-2-methylimidazole, 1-(2-hydroxyethyl) imidazole, N-methyl-N'-(2-hydroxyethyl)piperazine, and N-(2-hydroxyethyl)morpholine.

Claim 5 (Currently Amended): A catalyst composition for producing a rigid polyurethane foam and/or an isocyanurate-modified rigid polyurethane foam comprising at least the following amine compounds of (A) and (C):

[[a]] one or more quaternary ammonium salt salts selected from the group consisting of tetramethylammonium acetate, tetramethylammonium formate, tetraethylammonium acetate, tetraethylammonium formate, tetrapropylammonium acetate, tetrapropylammonium formate, tetrabutylammonium acetate, tetrabutylammonium formate, methyltriethylammonium acetate, methyltriethylammonium formate, methyltripropylammonium acetate, methyltripropylammonium formate, methyltributylammonium acetate, and methyltributylammonium formate; and

represented by the following general formula (1):



wherein each of  $\text{R}_1$  to  $\text{R}_3$  represents a saturated or unsaturated hydrocarbon group having 1 to 12 carbon atoms,  $\text{R}_4$  represents an alkyl group or an aromatic hydrocarbon group having 1 to 18 carbon atoms, and X represents an organic acid group having an acid dissociation constant (pKa) of 4.8 or less, provided that any two of  $\text{R}_1$  to  $\text{R}_3$  may together form a hetero ring through a carbon atom, an oxygen atom, or a nitrogen atom;

wherein (C) is one or two or more heterocyclic tertiary amine compounds selected from the group consisting of 1-isobutyl-2-methylimidazole, 1-methylimidazole, and 1,2-dimethylimidazole, 1-(2-hydroxyethyl)-2-methylimidazole, 1-(2-hydroxypropyl)-2-

~~methyylimidazole, 1-(2-hydroxyethyl)imidazole, N-methyl-N'-(2-hydroxyethyl)piperazine, and N-(2-hydroxyethyl)morpholine.~~

Claim 6 (Currently Amended): The catalyst composition according to claim 5, wherein the organic acid constituting the quaternary ammonium salt ~~represented by the general formula (1)~~ is formic acid and/or acetic acid.

Claim 7 (Canceled).

Claim 8 (Withdrawn): A raw material-blended composition for producing a rigid polyurethane foam and/or an isocyanurate-modified rigid polyurethane foam comprising a polyol component, water, and the catalyst composition according to claim 1.

Claim 9 (Withdrawn): The raw material-blended composition according to claim 8, which further comprises one or two or more compounds selected from the group consisting of 1,1,1,3,3-pentafluorobutane, 1,1,1,3,3-pentafluoropropane, 1,1,1,2-tetrafluoroethane, 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,2,3,3-hexafluoropropane, 1,1,1,4,4,4-hexafluorobutane, propane, butane, pentane, cyclopentane, and hexane, as a blowing agent.

Claim 10 (Withdrawn): The raw material-blended composition according to claim 8, which comprises an aromatic polyester polyol as the polyol component.

Claim 11 (Withdrawn): A process for producing a rigid polyurethane foam and/or an isocyanurate-modified rigid polyurethane foam, which comprises mixing a polyisocyanate with the raw material-blended composition according to claim 8, and reacting them.

Claim 12 (Withdrawn): A raw material-blended composition for producing a rigid polyurethane foam and/or an isocyanurate-modified rigid polyurethane foam comprising a polyol component, water, and the catalyst composition according to claim 5.

Claim 13 (Withdrawn): The raw material-blended composition according to claim 12, which further comprises one or two or more compounds selected from the group consisting of 1,1,1,3,3-pentafluorobutane, 1,1,1,3,3-pentafluoropropane, 1,1,1,2-tetrafluoroethane, 1,1,1,2,3,3,3-heptafluoropropane, 1,1,1,2,3,3-hexafluoropropane, 1,1,1,4,4,4-hexafluorobutane, propane, butane, pentane, cyclopentane, and hexane, as a blowing agent.

Claim 14 (Withdrawn): The raw material-blended composition according to claim 12, which comprises an aromatic polyester polyol as the polyol component.

Claim 15 (Withdrawn): A process for producing a rigid polyurethane foam and/or an isocyanurate-modified rigid polyurethane foam, which comprises mixing a polyisocyanate with the raw material-blended composition according to claim 12, and reacting them.

Claim 16 (Currently Amended): The catalyst composition according to claim 1, wherein the quaternary ammonium salt (A) is at least one selected from the group consisting of tetraethylammonium acetate, tetramethylammonium acetate and tetramethylammonium formate, and the hydrophobic amine compound (B) is ~~at least one selected from the group consisting of~~ N, N-dimethyldodecylamine and N-methyldicyclohexylamine.

Claim 17 (Previously Presented): The catalyst composition according to claim 1, wherein the weight ratio of the quaternary ammonium salt (A) to the hydrophobic amine compound (B) is 2.4/0.8-1.55/1.7.

Claim 18 (Currently Amended): The catalyst composition according to claim 5, wherein the quaternary ammonium salt (A) is at least one selected from the group consisting of tetraethylammonium acetate, tetramethylammonium acetate and tetramethylammonium formate, and the heterocyclic tertiary amine compound (C) is ~~at least one selected from the group consisting of 1-(2-hydroxypropyl)-2-methylimidazole and 1,2-dimethylimidazole.~~

Claim 19 (Previously Presented): The catalyst composition according to claim 5, wherein the weight ratio of the quaternary ammonium salt (A)/heterocyclic tertiary amine compound (C) is from 2.4/0.7 to 1.55/1.8.

Claim 20 (New): The catalyst composition according to claim 1, wherein (A) is at least one quaternary ammonium salts selected from the group consisting of tetramethylammonium acetate, tetraethylammonium acetate, tetrapropylammonium acetate, tetrapropylammonium formate, methyltriethylammonium acetate and methyltripropylammonium acetate; and

wherein (B) is at least one hydrophobic amine compounds selected from the group consisting of N,N-dimethyloctylamine, N,N-dimethylnonylamine, N,N-dimethyldecylamine, N,N-dimethylundecylamine, N,N-dimethyldodecylamine, N,N-dimethyltridecylamine, N,N-dimethyltetradecylamine, N,N-dimethylpentadecylamine, N,N-dimethylhexadecylamine, N,N-dimethylheptadecylamine, and N,N-dimethyloctadecylamine.

Claim 21 (New): The catalyst composition according to claim 20, wherein (B) is at least one hydrophobic amine compounds selected from the group consisting of N,N-dimethylundecylamine, N,N-dimethyldodecylamine and N,N-dimethyltridecylamine.

Claim 22 (New): The catalyst composition according to claim 5, wherein (A) is at least one quaternary ammonium salts selected from the group consisting of tetramethylammonium acetate, tetraethylammonium acetate, tetrapropylammonium acetate, methyltriethylammonium acetate and methyltripropylammonium acetate; and

wherein (C) is at least one heterocyclic tertiary amine compound selected from the group consisting of 1-isobutyl-2-methylimidazole, 1-methylimidazole, and 1,2-dimethylimidazole.

Claim 23 (New): The catalyst composition according to claim 5, wherein (C) is at least one heterocyclic tertiary amine compound selected from the group consisting of 1-methylimidazole and 1,2-dimethylimidazole.